



Federal Geographic Data Committee (FGDC) Marine and Coastal Spatial Data Subcommittee

Draft Meeting Minutes October 10, 2001

The Federal Geographic Data Committee (FGDC) Marine and Coastal Spatial Data Subcommittee met at the U.S. Commerce Building in Washington, DC, on October 10, 2001. An agenda is included at the end of the minutes. In addition, a number of items were distributed during the meeting, and a list of these items is included at the end of the minutes. Individuals who wish to request copies of these items should contact David Stein at Dave.Stein@noaa.gov.

Highlights

Anne Miglarese, chair of the Subcommittee, called the meeting to order. The last meeting was held on January 11, 2001 at the Coastal GeoTools Conference in Charleston, South Carolina. Anne proceeded to give an overview of the Subcommittee, its recent accomplishments, and where it fits within the FGDC framework. Below is the status of the action items from last meeting:

- The subcommittee's 2000-2001 spatial data report (accomplishment report) was submitted to the FGDC.
- The offshore cadastre (marine boundaries) was included as a framework theme in the draft version of Office of Management and Budget (OMB) Circular A-16.
- The FGDC Marine Boundary Working Group was established.
- The development of 3D/4D and marine and coastal data models, as well as data content standards for marine and coastal data, has been recognized as an important item for the subcommittee to pursue.

A priority template was distributed during the meeting. Subcommittee members were urged to take some time to list the activities they feel the Subcommittee

should undertake during the next year and beyond. These items will be the basis for the Subcommittee's Work Plan. Responses should be sent to David Stein at Dave.Stein@noaa.gov.

Agenda Items

1. **National Research Council (NRC) Coastal Mapping and Charting Study. David Feary and Terry Schaefer, NRC.** David Feary gave an overview of the organization of the NRC and the National Academy of Sciences, and Terry Schaefer gave a briefing on the Coastal Mapping and Charting Study being conducted by the Oceans Study Board and the Mapping Science Committee. The study will explore nationally the need for geospatial information in the coastal and ocean environments of the U.S., will identify current Federal and state programs in place to collect this information, and will identify gaps and overlaps that exist in geospatial data collection activities. The study also will consider the technologies used to acquire the framework coastal information and make recommendations for technology transitions given new methods and instrumentation currently available or soon to be commercially available. In addition, the report will evaluate the methods currently used to make this information available to the user community.
2. **Habitat Classifications for Marine and Coastal Areas. Denny Grossman, Association for Biodiversity Information (ABI).** ABI (soon to be named Nature Serve) is coordinating the development of standards for the classification and characterization of coastal and nearshore marine habitats. The project will include the development of standards, the development of a workshop, and the identification of sites and partners for the pilot implementation of the standards. The standards will provide a consistent, hierarchical system covering all states, territories, commonwealths, and other sovereign possessions of the United States; will be based on distinguishable natural community and physical environment; will allow for the identification and mapping of habitat types; and will provide the basis for developing functional links between underlying mechanisms structuring the ecosystem and the described biological community.
3. **Marine and Coastal ArcGIS Data Models. David Stein, NOAA Coastal Services Center.** David Stein presented the need for data modeling from the perspective of the Marine and Coastal Spatial Data Subcommittee and the NOAA Coastal Services Center. He recapped the meeting that was held at ESRI on October 4-5, 2001, to discuss developing a marine data model including the deep-ocean, and nearshore environments. Benefits of a marine data model would be to facilitate interoperability of data sets between users, simplify GIS implementation, facilitate data sharing, and provide the mechanism for data content standard implementation. The data types of highest importance to the subcommittee are bathymetry, shoreline, and marine boundaries. One of the goals of the subcommittee is to develop data content standards, which will in turn build the Coastal National Spatial Data Infrastructure. A data model would provide a critical component to a data content standard. The next steps in this process will be to identify what data theme should be modeled first, then identify subject matter experts to spearhead the modeling activities. ESRI's role will be to facilitate the data modeling process. The subcommittee's role will be to facilitate the data content standard development. An update on these activities will be presented

at the next meeting.

4. **United States Marine Corps (USMC) Shoreline Data Activities. Reid Nichols, Marine Information Resources Corporation.** Reid Nichols presented on the Coastal Battlefield Reconnaissance and Analysis (COBRA) project. COBRA uses a multispectral sensor system to detect minefields, obstacles, and camouflaged defenses. COBRA enhances tactical GIS for situation awareness, and has secondary benefits for environmental characterization, mapping, and assessments. The project will entail classifying littoral areas on a global scale, obtaining all sources of data, building a littoral logical data model, creating a master database, updating baseline products such as nautical charts and digital seafloor grids, and validating updated products for general use.

5. **Member Activity Updates.**

- **Shoreline** – Erica Wilson (NOAA NGS) updated the subcommittee on areas that have been recently mapped by NGS.
- **Article 76** – David Stein (NOAA CSC) gave a quick overview of Article 76. Article 76 of the United Nations Convention on the Law of the Sea defines the legal continental shelf and outlines methods to establish its outer limits where the shelf extends beyond the 200-mile limit. Recent federal activities that will support Article 76 claims will be discussed at the next meeting.
- **FGDC Marine Boundaries Working Group (MBWG)** – David Stein (NOAA CSC) gave an overview of the MBWG. The MBWG, chaired by Cindy Fowler (NOAA CSC) and Lee Thormahlen (MMS), was born out of the need to address the technical issues surrounding the development of digital maritime boundaries. The objectives of the working group are to foster integrated approaches to legal and spatial descriptions of marine boundaries, maximize public resources, and develop standardized methodologies to produce more complete and usable marine boundary data. The next meeting will be held November 6, 2001 at the U.S. Fish and Wildlife Service in Arlington, Virginia.
- **Standards.** David Stein (NOAA CSC) gave an update on subcommittee standards. *The Metadata Profile of the Content Standards for Digital Geospatial Metadata* has been endorsed by the FGDC. *The Hydrography Data Content Standard for Inland and Coastal Waterways* has been through public review and is ready to move to the next stage in the FGDC standards process. Tony Niles (Army Corps of Engineers) has agreed to work with David Stein to make this happen. *Geospatial Positioning Accuracy Standard, Part 5: Standard for Hydrographic Surveys and Nautical Charts* has completed public review and also needs to be moved to the next stage. Jerry Mills (NOAA Office of Coast Survey) is leading this effort.
- **Electronic Navigational Charts (ENCs).** Mike Brown updated the subcommittee on NOAA Office of Coast Survey's status with ENCs. Currently, there are 80 cells (ENCs) available at <http://chartmaker.ncd.noaa.gov/mcd/enc/index.htm>. Tony Niles updated the Subcommittee on Army Corps ENC progress and availability. Dick Brand (NIMA) spoke briefly about a project to develop an intelligent nautical chart using a three-dimensional database.

Action Items

1. Complete the priority worksheets and submit work items to David Stein.
2. Prioritize data themes to be modeled.
3. Make progress with moving *The Hydrography Data Content Standard for Inland and Coastal Waterways* and *Geospatial Positioning Accuracy Standard, Part 5: Standard for Hydrographic Surveys and Nautical Charts* through the FGDC process.

Items Distributed at Meeting

1. Agenda
2. Handouts: January 2001 meeting minutes, priority worksheet, ArcNews article on Data Models, Ocean Studies Board brochure.

Attendees

Name	Agency	email
Bill Sargent	Florida Fish and Wildlife Commission	Bill.Sargent@fwc.state.fl.us
Reid Nichols	Marine Information Resources Corp.	mirc@home.com
Tony LaVoi	NOAA Coastal Services Center	Tony.lavoi@noaa.gov
Fred Ganjon	CARIS USA	Fred.ganjon@caris.com
Leslie Wollack	NSGIC	Lwollack@usra.edu
David Stein	NOAA Coastal Services Center	Dave.Stein@noaa.gov
Cindy Fowler	NOAA Coastal Services Center	Cindy.Fowler@noaa.gov

Anne Hale Miglarese	NOAA Coastal Services Center	<u>Anne.Migliarese@noaa.gov</u>
Jim Brand	NAVOCEANO	<u>Brandj@navo.navy.mil</u>
Tony Niles	Army Corps of Engineers –TEC	<u>Tniles@tec.army.mil</u>
Mike Brown	NOAA Office of Coast Survey	<u>Mike.brown@noaa.gov</u>
David Feary	NRC-BESR	<u>Dfreary@nas.edu</u>
Terry Schaefer	Ocean Studies Board	<u>Tschaefer@nas.edu</u>
Tricia A. Lewallen	PNNL	<u>Tricia.lewallen@pnl.gov</u>
Dennis Grossman	ABI	<u>Dgrossman@abi.org</u>
Erika Wilson	NOAA National Geodetic Survey	<u>Erika.wilson@noaa.gov</u>
Stephen Huett	NAWCAD	<u>Huetts@navai.navy.mil</u>
Capt. David Gerlach	USMC SYCOM	<u>Gerlachb@mcsc.usmc.mil</u>
John W. Peel	STDC – Instellisphere	<u>Jpeel@stdc.net</u>

Agenda

Federal Geographic Data Committee

Marine and Coastal Spatial Data Subcommittee Meeting

Wednesday, October 10, 2001

1:00 pm – 4:30 pm

Department of Commerce

Room 1412

1:00 – Welcome and introductions – Anne Hale Miglarese, (Chair) NOAA CSC

1:15 – Recap of last meeting and 2001 accomplishments

1:30 – National Research Council (NRC) Coastal Mapping and Charting Study –
Terry Schaefer, National Academy of Sciences (NAS)

2:00 – Habitat Classification Standards for Marine and Coastal Areas – Denny
Grossman,

Association for Biodiversity Information (ABI)

2:30 – Marine and Coastal ArcGIS Data Models – David Stein, NOAA CSC

3:00 – Break

3:15 – United States Marine Corps (USMC) shoreline data activities – Reid Nichols

3:30 – Updates on member activities

- Shoreline
- Article 76
- Marine Boundary Working Group
- Standards
- ENCs

4:00 – Open discussion/next steps

4:30 – Meeting adjourned

Submitted by David Stein

FGDC Bathymetric Subcommittee Executive Secretary